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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,807	10/19/2001	Gint J. Grabauskas	P6308	9466

21127 7590 12/02/2004

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EXAMINER	
SAM, PHIRIN	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/039,807	GRABAUSKAS ET AL.	
	Examiner	Art Unit	
	Phirin Sam	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,18-31,35-39 and 42-55* is/are rejected.

7)☒ Claim(s) *15-17,32-34,40,41 and 56-58* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

PHIRIN SAM
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *020703*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14, 18-31, and 35-55 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,151,331 (thereinafter called "Wilson").

Wilson discloses the invention (**claims 1-2, 7-8, 24-25, 42-43, and 48-49**) as claimed including a method for discovering a topology of a switch from an initiator device (see Fig. 1, elements 14 and 12), wherein the switch includes a plurality of switch ports, wherein a plurality of input/output (1/0) devices are connected to the switch ports (see Fig. 1, elements 20, 30, 12), wherein each 1/0 device and the initiator device connect to the switch through one of the switch ports (see Fig. 1, elements 14, 12, 20, 30), wherein the initiator and 1/0 devices communicate on a first network configured by the switch, wherein the initiator device communicates with the switch over a second network, and wherein the initiator device (see Fig. 1, element 14) performs:

(a) submitting a first query over the first network to the switch requesting a unique address of a plurality of 1/0 devices that are accessible to the initiator device over the first network (see Figs. 1 and 2, elements 14 or 18, col. 2, lines 63-67, col. 3, lines 1-25, 66-67, col. 4, lines 1-3).

(b) receiving, in response to the first query to the switch on the first network, the unique address of each 1/0 device from the switch (see Fig. 2, col. 4, lines 9-12).

(c) submitting a second query over the second network to the switch for information on switch ports on the switch (see Fig. 1, col. 4, lines 55-58, 60-61).

(d) receiving, in response to the second query to the switch over the second network, the information on the switch ports (see Fig. 1, col. 4, lines 61-65).

(e) generating information on a topology of the switch ports and the initiator and 1/0 devices having the unique address (see Fig. 3, col. 4, lines 32-48).

Regarding claims 3, 20, and 44, Wilson discloses wherein each loop comprises a Fibre Channel Arbitrated Loop, and wherein each unique address comprises an eight-bit Arbitrated Loop Physical Address (see Fig. 4, col. 5, lines 54-57).

Regarding claims 4-5, 14, 21-22, 31, 37, and 45-46, Wilson discloses the method further comprising:

(1) receiving, in response to the first query to the switch over the first network, switch addresses the switch assigns to the 1/0 devices attached to the switch ports, wherein the topology information is generated to include the received switch addresses for the 1/0 devices (see Fig. 2, col. 3, lines 47-61).

Regarding claims 6, 23, and 47, Wilson discloses wherein the first network comprises a Fibre Channel network and wherein the second network comprises an Ethernet network, wherein the switch and less than all of the devices are connected to the second network (see Fig. 1, col. 3, lines 5-8).

Regarding claims 9, 12-13, 26, 29-30, 38-39, 50, and 53-55, Wilson discloses the initiator device further performs:

(a) submitting an additional query on the second network to at least one other initiator device connected to one switch port, wherein the at least one other initiator device generates topology information to determine topology information for 1/0 devices to which the at least one other initiator device is capable of communicating (see Fig. 4, col. 5, lines 46-60, col. 6, lines 6-10).

(b) updating the topology information with topology information received in response to each additional query on the second network from the at least one other initiator device (see Fig. 4, col. 6, lines 20-28).

Regarding claim 11, 28, and 52, Wilson discloses wherein the 1/0 devices include storage systems and initiator devices (see Fig. 1, col. 2, lines 63-67, and col. 3, lines 1-5).

Regarding claims 10, 18, 19, 27, 35, 36, and 51, Wilson discloses a system for discovering a network topology, comprising:

(a) a switch having a plurality of switch ports (see Fig. 1, element 12 and 18, col. 2, lines 63-65, col. 3, lines 12-16).

(b) at least one 1/0 device, wherein each 1/0 device is connected to one switch port (see Fig. 1, col. 3, lines 12-3-8).

(c) an initiator device connected to one switch port (see Fig. 1, col. 2, lines 63-65).

(d) a first network configured by the switch, wherein the initiator and 1/0 devices communicate on the first network through the switch ports (see Fig. 1, col. 2, lines 63-67, col. 3, lines 1-5).

(e) a second network on which the initiator device and switch communicate (see Fig. 1, col. 3, lines 5-8).

(f) a computer readable medium within the initiator device including code executed by the initiator device, wherein the code causes the initiator device to perform:

(i) submitting a first query over the first network to the switch requesting a unique address of a plurality of 1/0 devices that are accessible to the initiator device over the first network (see Fig. 4, col. 5, lines 23-26, 35-39).

(ii) receiving, in response to the first query to the switch on the first network, the unique address of each 1/0 device from the switch (see Fig. 4, col. 5, lines 40-46).

(iii) submitting a second query over the second network to the switch for information on switch ports on the switch (see Fig. 4, col. 5, lines 46-54).

(iv) receiving, in response to the second query over to the switch over the second network, the information on the switch ports (see Fig. 4, col. 5, lines 61-67, col. 6, lines 1-5).

(v) generating information on a topology of the switch ports and the initiator and 1/0 devices having the unique address (see Fig. 4, col. 6, lines 20-28).

Allowable Subject Matter

3. Claims 15-17, 32-34, 40-41, and 56-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) Latif et al (U.S. Pub. 2003/0091037) discloses transferring data between IP network devices and SCSI and Fibre Channel devices over an IP network.

(2) Carlson et al (U.S. Pub. 2003/0093501) discloses the method, system for configuring system resources.

(3) Kim (U.S. Pub. 2002/0194407) discloses maintaining Fabric device configuration through dynamic reconfiguration.

(4) Allen et al (U.S. Pub. 2002/0162010) discloses system and method for improved handling of Fiber channel remote devices.

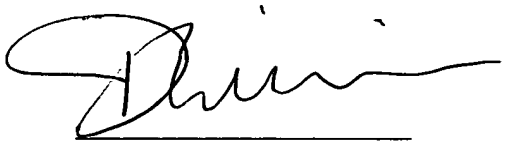
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on Mon-Fri, 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth N Vanderpuye can be reached on (571) 272 - 3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

Date: November 28, 2004



PHIRIN SAM
PRIMARY EXAMINER